CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 77-135

WASTE DISCHARGE REQUIREMENTS FOR:

AMLOC COMPANIES, INCORPORATED
HILLSIDE CLASS II-2 SOLID WASTE
DISPOSAL SITE, COLMA, SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. Amloc Companies, Incorporated, hereinafter called the discharger, submitted a report of waste discharge dated June 30, 1972, and a site geotechnical report prepared by Resources Engineering and Management dated November 13, 1975, for the Hillside solid waste disposal facility.

2. The discharger proposes to operate, maintain and improve the existing site for disposal of limited categories of group 2 wastes such as paper, cardboard, cloth, glass, street refues, yard clippings, and group 3 wastes. The site is located in the City of Colma, surrounded by the Cypress Hills Golf Course to the southwest, a mobile home park to the northwest, and undeveloped lands of the Crocker Land Company to the north and east as shown in Attachment A which is incorporated herein and made part of this Order.

3. The disposal site covers approximately 40 acres of land and is about 400 feet above sea level in the Merced Valley. The site lies along the southwest side of San Bruno mountain. The bedrock, which underlie the area, consists of sandstones and shales, commonly known as the Franciscan Formation. The subsurface conditions encountered at the site consist of unconsolidated sands and minor amounts of clay and silt, commonly known as the Colma and Merced formations. The Colma formation overlies the Merced formation and extends from the ground surface to depths of approximately 200 feet. The active San Andreas fault lies about two and one-half miles southwest of the disposal site. Two inactive faults, the San Bruno and Hillside faults, as well as other minor faults are in the proximity of the landfill site.

4. All groundwater occurring in the vicinity of the landfill is derived from the direct penetration of rainfall and percolation of runoff. A useable groundwater table exists within three hundred feet of the ground surface, which is mainly used for the irrigation of cemeteries and golf courses.

5. Subsequent to the modifications necessary to comply with this Order, this disposal site will meet the criteria contained in the California Administrative Code, Title 23, Chapter 3, Subchapter 15 for classification of a portion of the site as a Class II-2 disposal site to receive limited Group 2 waste and Group 3 wastes.

6. The beneficial uses of groundwaters in the vicinity of the landfill are:

   Landscape irrigation
   Domestic use

7. The Board adopted a Water Quality Control Plan for the San Francisco Bay Basin in April 1975 and this Order implements the water quality objectives stated in that plan.

8. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

9. The Board, in a public meeting heard and considered all comments pertaining to the discharge.

10. This Order authorizes the continued operation of a privately owned Class II-2 solid waste disposal site. The Order will not have a significant effect on the environment pursuant to the California Environmental Quality Act and is exempt as provided in Section 15101, Title 14, California Administrative Code.

IT IS HEREBY ORDERED, that Amloc Companies, Inc. - Hillside Class II-2 Solid Waste Disposal Site and any other persons that shall own the land or operate this landfill shall comply with the following:

A. Waste Disposal Specifications

1. The disposal of wastes shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

2. Limited group 2 wastes shall not be placed in or allowed to contact ponded water from any source whatsoever.

3. Group 1 wastes and hazardous wastes shall not be deposited or stored at this site.

4. Sewage sludge or liquid wastes shall not be discharged with group 2 and 3 wastes, unless approved in writing by the Executive Officer of this Board.

5. The following group 2 wastes shall not be deposited at this site:

   a. Garbage from handling, preparation, processing, or serving of food or food products.

   b. Pesticide containers.

   c. Manure

   d. Dead animals and portions thereof.

6. The discharger shall remove and relocate any wastes which are discharged at this site in violations of these requirements.

B. Leachate and Drainage Specifications

1. Leachate from Group 2 wastes and ponded water containing leachate or in contact with refuse shall not be discharged to waters of the State.

2. Water used during disposal site operation shall be limited to a minimal amount reasonably necessary for dust control and fire suppression.

3. The disposal area shall be protected from any washout or erosion of wastes or covering material, and from inundation, which could occur as a result of floods having a predicted frequency of one in 100 years.

4. Vertical and lateral hydraulic continuity with ground waters shall be prevented by the presence of a soil barrier above the groundwater at least five feet in thickness with the top eighteen inches of soil to be compacted to ninety percent compaction or attain a permeability of 1×10^{-6} cm/sec or less.

5. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources shall not contact or percolate through group 2 wastes during disposal operation and for the active life of the site. The perimeter drainage ditches and all other facilities shall be designed to convey the 100 year storm runoff, and withstand differential settlement. These facilities shall be constructed over a natural ground or through lined channel or pipes.

6. As portions of the site are closed, the exterior surfaces shall be graded to a minimum slope of three percent in order to promote lateral runoff of precipitation and to minimize infiltration of precipitation, in addition, all completed disposal areas shall be covered with a minimum of three feet of uncontaminated material, one foot of which is compacted to attain a permeability no greater than 10^{-6} cm/sec.

7. The migration of methane gas from the landfill area shall be controlled as necessary to prevent the creation of a nuisance.

8. The useable groundwater shall not be degraded as a result of the solid waste disposal operation.

C. Provisions

1. The discharger shall comply with all portions of this Order except specification B.4 immediately upon adoption.

2. The discharger shall comply with the following time schedule to assure compliance with specification B.4:

Task	Report of Compliance Due
Determine status of compliance	December 1, 1977
If noncompliance is reported, then submit a plan and time schedule for full compliance	March 1, 1978

3. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.

4. Within 30 days after the completion of filling of any portions of the disposal areas, submit documentations signed by a registered civil engineer or a certified engineering geologist that the exterior surfaces of these newly completed portions are covered and graded as described under item B.6.

5. The discharger shall file with this Board a report of any material change or proposed change in the character, location or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries, contours or ownership of the disposal area(s).

6. One hundred and eighty (180) days prior to discontinuing use of this site for waste disposal, the discharger shall submit a technical report to the Board describing the methods and controls used to assure protection of the quality of surface and groundwaters of the area during final operations and during any subsequent use of the land. This report shall be prepared by or under the supervision of a registered engineer or a certified engineering geologist. The method used to close the site and maintain protection of the quality of the surface and groundwaters shall comply with waste discharge requirements established by this Regional Board.

7. This Board considers the property owner to have a continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge or water applied to this property during subsequent use of the land for other purposes.

8. The discharger shall file with the Board technical reports on self-monitoring work performed according to the detailed specifications contained in any Monitoring and Reporting Program which may be directed by the Executive Officer.

9. The discharger shall permit the Regional Board:

   (a) Entry upon premises on which waste are located or in which any required records are kept,

   (b) Access to copy any records required to be kept under terms and conditions of this Order,

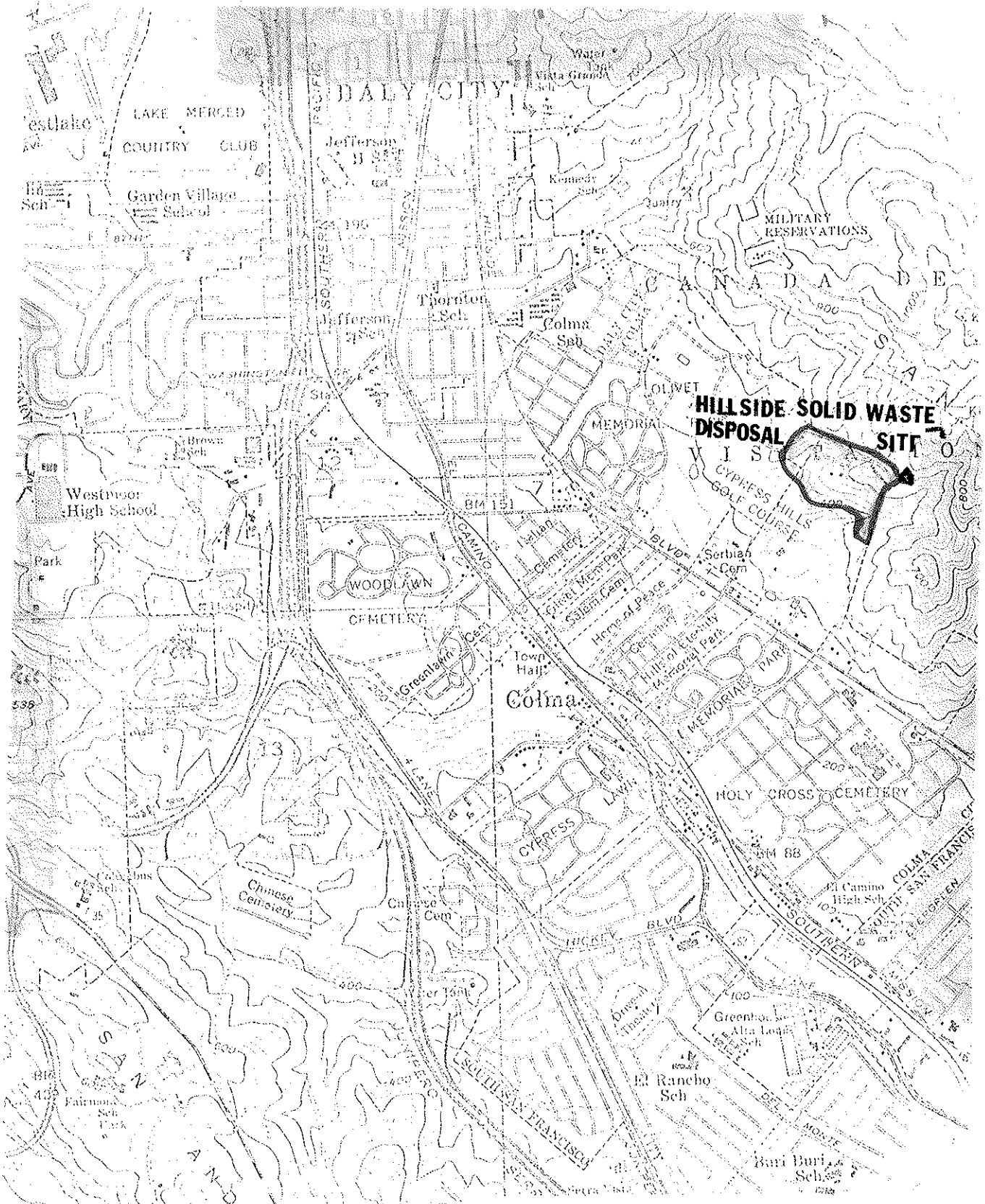
   (c) Inspection of monitoring equipment or records, and

   (d) Sampling of any discharge.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on October 18, 1977.

FRED H. DIERKER
Executive Officer

Attachments:
A&B - Maps
Self-Monitoring Program

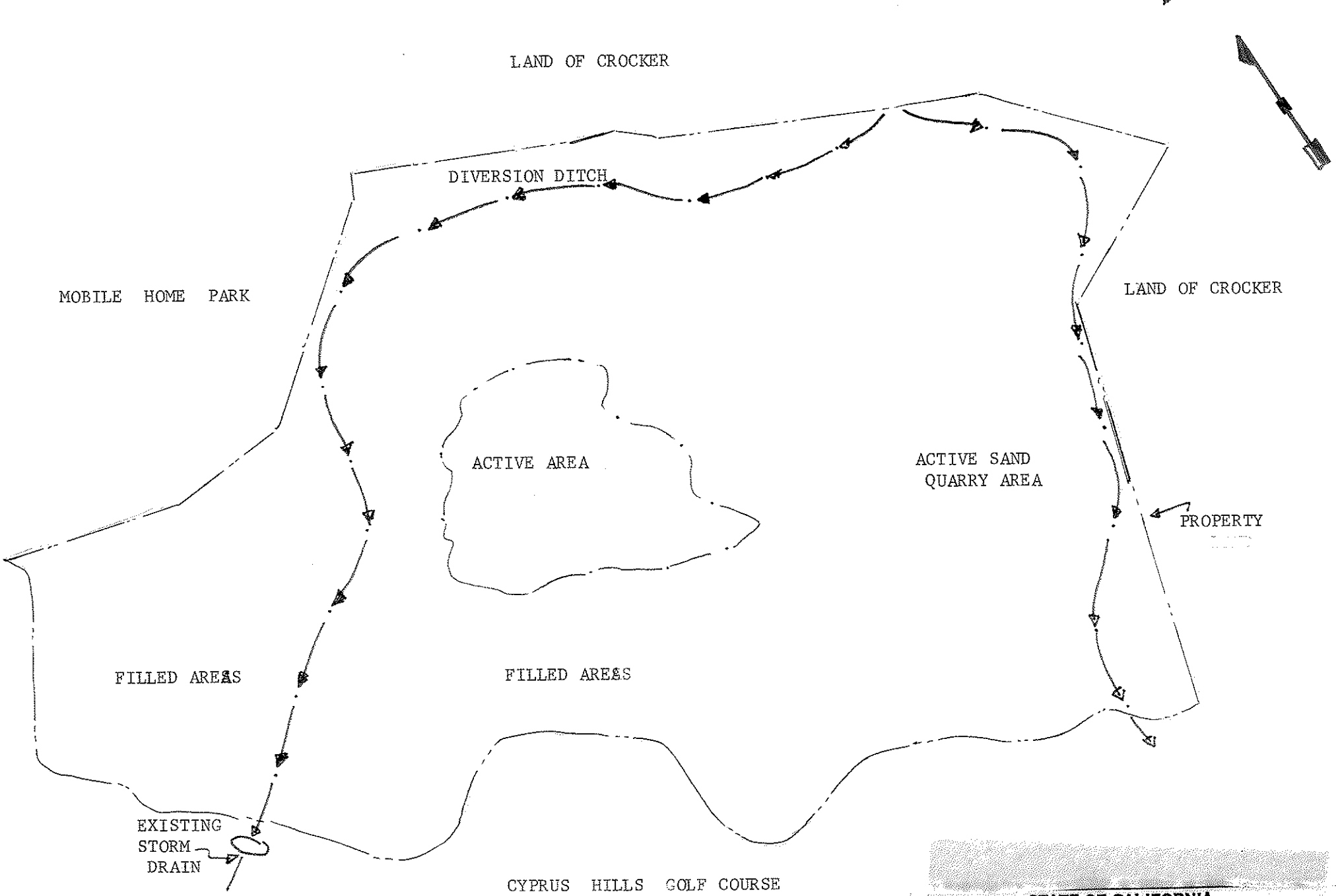


STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

AMLOC COMPANIES, INC. -HILLSIDE SOLID WASTE CLASS II-2 DISPOSAL SITE.
LOCATION OF THE SITE

ATTACHMENT "A". ORDER NO. 77-135

DRAWN BY:	DATE:	DRWG. NO.



STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

AMLOC COMPANIES, INC.
HILLSIDE SOLID WASTE CLASS II-2DISPOS-
-AL SITE .
ATTACHMENT "B" ORDER NO. 77-135

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

Amloc Companies, Inc., Hillside Solid

Waste Class II-2 Disposal Site

Colma, San Mateo County

ORDER NO. 77-135

CONSISTS OF

PART A

AND

PART B

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

AMLOC COMPANIES, INC.
HILLSIDE SOLID WASTE CLASS II-2 SOLID WASTE
DISPOSAL SITE, COLMA, SAN MATEO

PART A

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a monitoring program by a waste discharger, also referred to as self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by this Regional Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater qualilty inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the latest edition of Standard Methods for the Examination of Water and Wastewater prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, or other methods approved and specified by the Executive Officer of this Regional Board, including the methods specified in attached APPENDIX E.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health or a laboratory approved by the Executive Officer. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

1. Grab sample means a sample collected at any time.

2. Disposal Area and Periphery of Disposal Facilities

This applies to solid wastes confined or unconfined.

(1) Evidence of leaching liquid from area of confinement and estimated size of affected area. (Show affected area on a sketch.)

(2) Odor: presence or absence, characterization, source, and distance of travel.

(3) Estimated number of waterfowl and other water-associated birds in the disposal area and vicinity.

(4) Weather condition: wind - direction and estimated velocity.

D. SCHEDULE OF SAMPLING, ANALYSES, AND OBSERVATIONS

The discharger is required to perform observations, sampling, and analyses according to the schedule in Part B.

E. RECORDS TO BE MAINTAINED

1. Written records shall be maintained at the landfill site or office and shall be retained for a minimum of 3 years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board. Such records shall show the following for each sample:

a. Identity of sampling and observation stations by number.

b. Date and time of sampling and/or observations.

c. Date and time that analyses are started and completed, and name of personnel performing the analyses.

d. Complete procedure used, including method of preserving sample and identity and volumes of reagents used. A reference to specific section of Standard Methods is satisfactory.

e. Calculations of results.

f. Results of analyses and/or observations.

F. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Written reports shall be filed for each calendar month (unless specified otherwise in Part B) by the fifteenth day of the following month. In addition, an annual report shall be filed as indicated in F-1-g. The reports shall be comprised of the following:

a. Letter of Transmittal:

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include a discussion of requirement violations found during the past month and actions taken or planned for correcting violations, such as plant operation modifications and/or plant facilities expansion. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true and correct.

Monitoring reports shall be signed as follows:

(1) In the case of corporations, by a principal executive officer at the level of vice-president or his duly authorized representative if such representative is responsible for the overall operation of the facility from which the discharge originates,

(2) In the case of a partnership, by a general partner, or

(3) In the case of a sole proprietorship, by the proprietor,

(4) In the case of a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

b. Compliance Evaluation Summary

Each report shall be accompanied by a compliance evaluation summary sheet prepared by the discharger. The report format will be specified by the Regional Board.

c. Map or Aerial Photograph

A map or aerial photograph shall accompany the report showing sampling and observation station locations.

d. Results of Analyses and Observations

Tabulations of the results from each required analysis specified in Part B by date, time, type of sample, and station, signed by the laboratory director. The report format will be specified by the Regional Board.

e. List of Approved Analyses

(1) Listing of analyses for which the discharger is approved by the State Department of Health.

(2) List of analyses performed for the discharger by another approved laboratory (and copies of reports signed by the laboratory director of that laboratory shall also be submitted as part of the report).

f. Annual Reporting

By November 15 of each year, the discharger shall submit an annual report to the Regional Board covering the previous calendar year. The report shall contain:

1. Tabular and graphical summaries of the monitoring data obtained during the previous year.

2. Comprehensive discussion of the compliance record and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.

3. A map showing the area in which filling has been completed during prior calendar year.

4. A summary of the groundwater analyses.

PART B

I. DESCRIPTION OF SAMPLING STATIONS & SCHEDULE OF SAMPLING, ANALYSES & OBSERVATIONS

A. WASTE MONITORING

1. Monthly, record the total volume and weight of a refuse (in cubic yards and tons) deposited on the site during the month, and the daily average. Report quarterly.

2. Monthly, record the volume of fill completed, in cubic yards, showing the location(s) and dimensions on a sketch or a map. Report Quarterly.

(Weight of the refuse shall be estimated)

B. ON SITE OBSERVATION

Station	Description
S-1 thru S-'n'	Observation stations located on presently active area or completed portion of the site at grid squares delineated by 500 foot grid network.

Station	Frequency of Observation	Observations
All S Stations in active disposal areas	Weekly throughout the year Report Quarterly	1. Evidence of ponded water at any point on the disposal site. 2. Evidence of refuse not confined within the disposal area. 3. Evidence of "day-lighted" refuse. 4. Evidence of waste in contact with pools of surface water. 5. Evidence of odors presence or absence, the characteristics, intensity, source, distance of travel. 6. Evidence of leachate leaving the disposal site, and estimated size of affected area.

C. GROUNDWATER AND PEIZOMETRIC GRADIENT MONITORING

Station	Description
G-1	A groundwater monitoring well located at the existing test well "A" as shown in Attachment "C".

A well drilling log shall be submitted for each sampling well established per this monitoring program. The wells shall be perforated and have a minimum diameter of six inches.

Station	Type of Sample and Frequency	Analyses	Units
G-1 station	Grab sample quarterly throughout the year	water level	feet
		chloride	mg/l
		COD	mg/l
		pH	electrometric
		Nitrate Nitrogen (as N)	mg/l
		Total phosphate	mg/l
		Total Kjeldehl nitrogen (as N)	mg/l
		TDS	mg/l
		Conductivity	micromhos/cm
		Free CO_2	mg/l

The G station shall be reviewed after one year of analyses. Prior to taking any grab samples from the groundwater well, the well water must be pumped a minimum of two minutes.

D. MISCELLANEOUS REPORTING

1. Prior to the placement of waste material in the new active area, the discharger shall submit documentation of the presence of a material soil barrier of at least five feet in thickness as described under item B.4. of Order on the bottom of each disposal area. The documentation must be certified by a certified civil engineer or engineering geologist.

2. Within 30 days after the completion of filling of any portion of the disposal, submit documentations signed by a registered civil engineer or a certified engineering geologist that the exterior surfaces of these newly completed portions are covered and graded to properly drain all rainwater as described under item B.6 of Order No

3. Submit documentation of all actions taken to observe, minimize, and control the migration of methane gas from Group II waste necessary to prevent the creation of a nuisance. This report is due no later than February 15, 1978.

I, Fred H. Dierker, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:

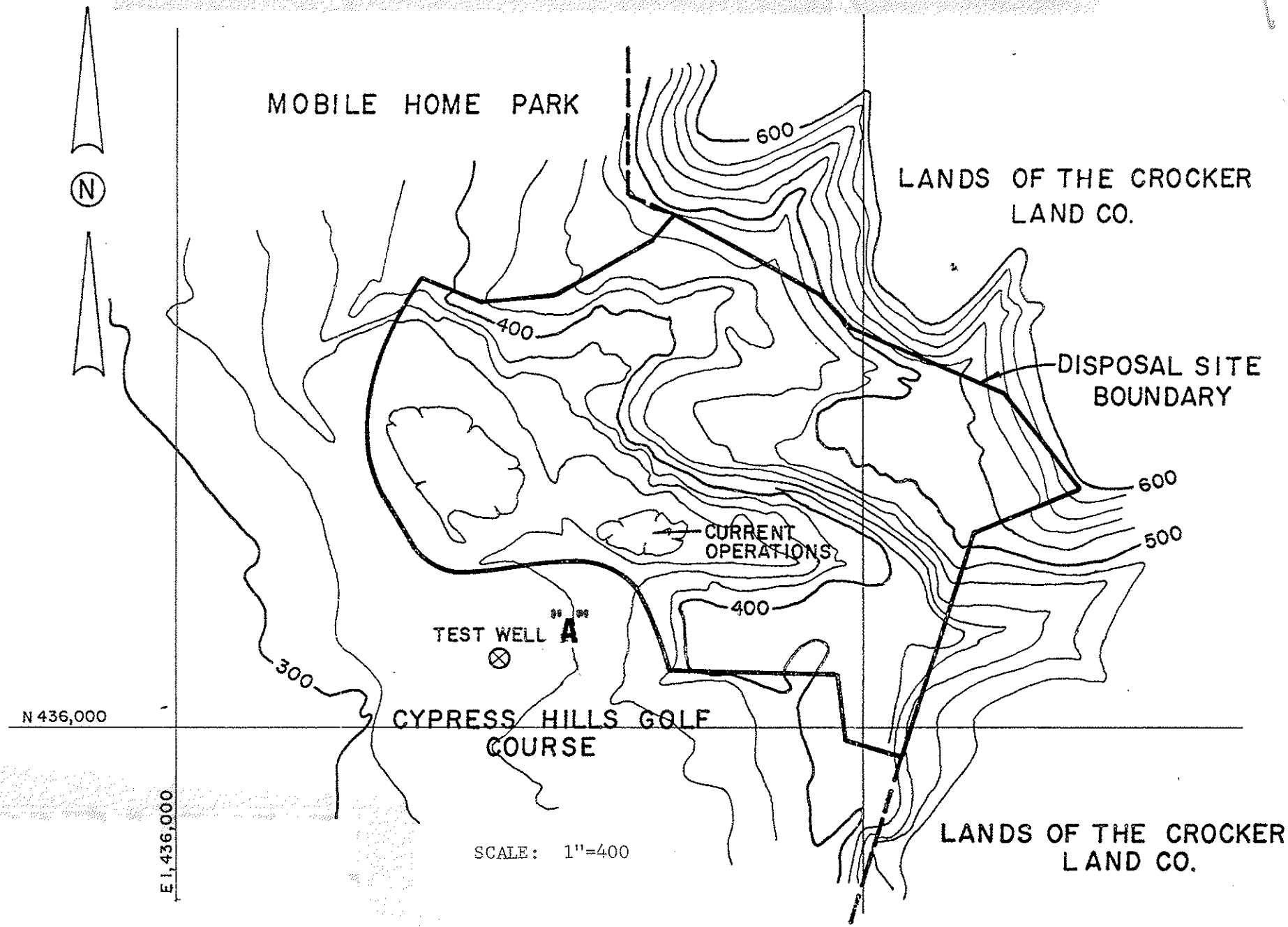
1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in the Regional Board Order No. 77-135.

2. Has been ordered in writing by the Executive Officer on and becomes effective immediately.

3. May be reviewed at any time subsequent to the effective date upon written notice from either the Executive Officer or the discharger, and will be revised upon written agreement of the Executive Officer and the discharger.

FRED H. DIERKER
Executive Officer

Attachments:
1. Attachment "C"
2. Appendix "E"
3. Example of Reporting Format


MOBILE HOME PARK
LANDS OF THE CROCKER LAND CO.
DISPOSAL SITE BOUNDARY
CURRENT OPERATIONS
TEST WELL "A"
CYPRESS HILLS GOLF COURSE
LANDS OF THE CROCKER LAND CO.
N
600
400
300
500
N 436,000
E 1,436,000
SCALE: 1"=400

ATTACHMENT

An Example

A. WASTE MONITORING

1. Daily average approx (yd^3), total volume (yd^3) and weight (tons)
2. Include map showing the location(s) and dimensions on a sketch or map for volume of fill completed.

	Refuse Deposited on Site During Month		Volume of Fill Completed
Date	Total Volume yd^3	Total Weight Tons	yd^3
JAN			
FEB			
MAR			
APR			
MAY			
JUNE			
JULY			
AUG			
SEP			
OCT			
NOV			
DEC			

B. ON SITE OBSERVATIONS

Note: Include Map and Location of Stations

Month Date	Limit	Parameter	
Jan Feb March	Nil	Evidence of Ponded water at any point on the Disposal Site	ALL S STATIONS
	Nil	Evidence of refuse not confined within disposal site or a cell	
	Nil	Evidence of erosion and/or daylighted refuse	
	Nil	Evidence of gp2 wastes in contact with pools of surface water	
	Nil	Evidence of refuse not confined within the property boundary	ALL P STATIONS
	Nil	Evidence of odors, presence or absence	
	Nil	Evidence of leachate or water leaving or entering the disposal site	

C. Leachate and/or Seepage

Include a map indicating locations of discharge (s)

Date:

Station

Time

Observations

Color Type

Odor Intensity

Source

Analyses:

Dissolved

Oxygen mg/l

Sulfides (mg/l)

Total

Dissolved

pH units (electrometric)

COD (mg/l)

Conductivity

Microm hos/cm Analysis by:

Note: Written report shall be included to describe the locations of seepage, affected areas, flow rate, and corrective action undertaken

MONITORING REPORT
RECEIVING WATERS

D. Receiving Water — An Example

Date:										
STATION										
ANALYSES:										
Dissolved Oxygen mg/l										
^{o}C										
Sulfides (mg/L) Total										
Dissolved										
pH Units										
JC Units										
MPN/100ml										
mg/L										
mg/L										
mg/L										
mg/L										
mg/L										
mg/L										
mg/L										
Color description										
Odors description										
Electrical Conductivity micromhos/cm										

TIDES

Elev.	Time

Analysis by: _____

E. GROUNDWATER AND PEIZOMETRIC GRADIENT MONITORING

MONITORING REPORT
WELLS

Date					Page	of
Wells No.						
TIME						
DEPTH OF WELL (feet)						
DEPTH TO WATER (feet)						
OBSERVATIONS						
Color Type						
Odor Type						
Intensity						
ANALYSES						
Leachate Level (feet)						
Chloride mg/l						
Chemical Oxygen Demand COD mg/l						
Free Carbon Dioxide mg/l						
Total Dissolved Solids mg/l						
Nitrate Nitrogen (as N) mg/l						
Total Kjedahl Nitrogen (as N) mg/l						
Electrical Conductivity microm hos/cm						